FIRE PREVENTION WEEK OCTOBER 4–10

Teaching and Computers Poster Series
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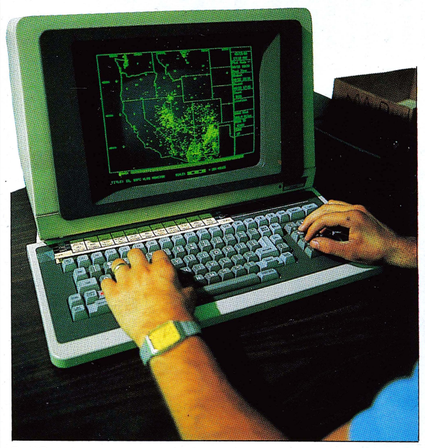
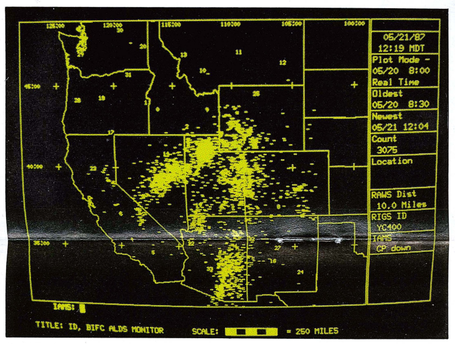
Poster copy by Mary Dalheim

Newsline

Computers Fight Forest Fires



David Frazier



David Frazier

For settlers in colonial times, the best way to fight forest fires was a *bucket brigade*. A bucket brigade was a double line of people that went from a source of water to a fire. One line of people passed buckets of water from the water source to the fire, where the buckets were dumped. The other line passed the empty buckets back to be refilled.

Methods for fighting forest fires have come a long way since bucket brigades. Today, even computers are used.

With the help of antennae that are set up in forests, computers can tell when lightning has struck a wooded area. (Lightning causes 70 to 90 percent of all forest fires.) The computer notifies fire fighters of a "lightning strike" and displays its location on a screen so that the fighters can go immediately to the spot to check for fire.

If the crew finds a fire, members can put the computer to work again. They input information such as wind speed and direction, ground temperature, and the type of timber burning. The computer then predicts the forest fire's behavior and suggests the best ways to combat it.

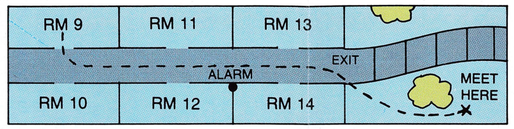
Fighting forest fires is likely to become more and more scientific, thanks to computers. Can you imagine some of the ways computers might help in the future?

Computers can help locate forest fires (top). The computer displays a map (left) that shows where lightning has struck.

TRY THIS!
Make a Fire Map

Use a drawing program like *Delta Drawing* (published by Spinnaker) or any Logo program to make a map of your floor or wing of the school. Mark the location of all fire alarms and window and door exits. Draw a dotted line to show a good fire escape route for students in your room. Print out the map and post it on a classroom wall. As a class, follow the fire route you outlined.

Save your map to disk. You may wish to use it as a model for making similar maps for other classrooms.



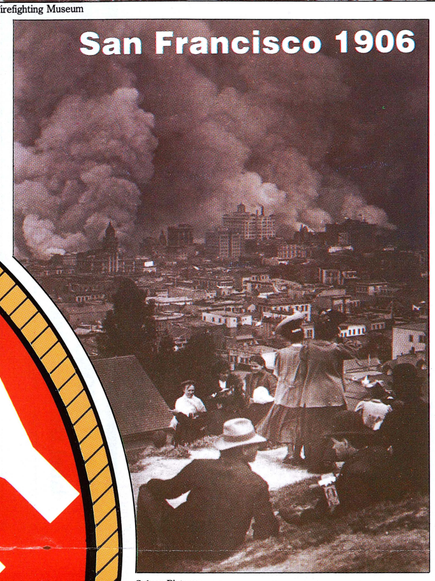
SAMPLE FIRE MAP

FOCUS ON: FIRE SAFETY

Firefighting Museum

HISTORY
Fearsome Fires

The most famous U.S. fire is probably the Great Chicago Fire of 1871. The fire broke out in the barn of the O'Leary family. It is said, although it has never been proven, that Mrs. O'Leary's cow caused the fire by kicking over a lantern. The fire spread to all of the wooden buildings in the city and took 250 lives.



Culver Pictures

The Great Chicago Fire was not the most tragic in America, however. The fire that has taken the most U.S. lives to date is a fire that broke out in Peshtigo, Wisconsin, the day after the Great Chicago Fire. That fire claimed more than 1200 lives and destroyed four million acres of forestland. Many think the fire was started by a bolt of heat lightning.

Other famous fire disasters in the history of our country include the 1906 earthquake-fire of San Francisco and a 1904 fire on the *General Slocum* tour boat.

Read up on these and other historical fires. Use data base software to create a data file that stores your research findings. Then use your data base program's SORT, SEARCH, and PRINT functions to help answer such questions as: What do the fires have in common? How many fires were caused by carelessness? What safety measures (if any) could have prevented the fires? If computers had been invented, how might they have been used to fight each fire?

A sample data record on fire disasters might look like this:

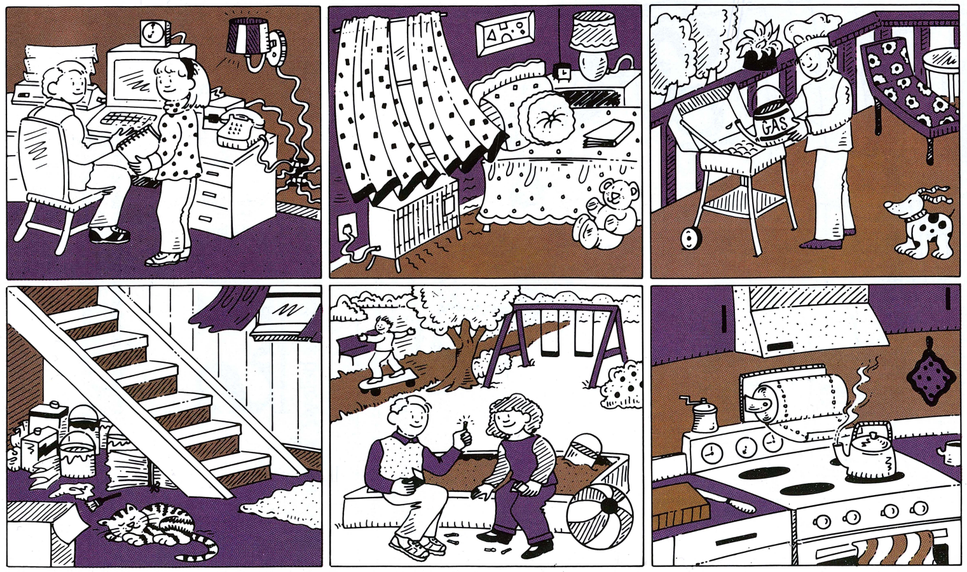
FIRES
Name: Peshtigo Forest Fire
Date: October 9, 1871
Place: Peshtigo, WI
Rank: Largest U.S. fire.
Damage: 1200 victims, four million acres of prime forest
How Started: Maybe heat lightning or the friction of two trees rubbing together.

Quiz

BE A FIRE MARSHALL!

Can you find the fire hazard in each of these pictures? If so, you have earned the title of Fire Marshall.

Teresa Anderko



TRY THIS!
Spread the Word About Safety

Use graphics software like *Certificate Maker* (published by Springboard), *Print Shop* (Broderbund), or *Principal's Assistant* (Mindscape) to create flashy signs and banners on fire safety. Here are some possible slogans: *Don't Play with Matches, Crawl to Safety, Learn the Fire Telephone Number.*

Nate Butler

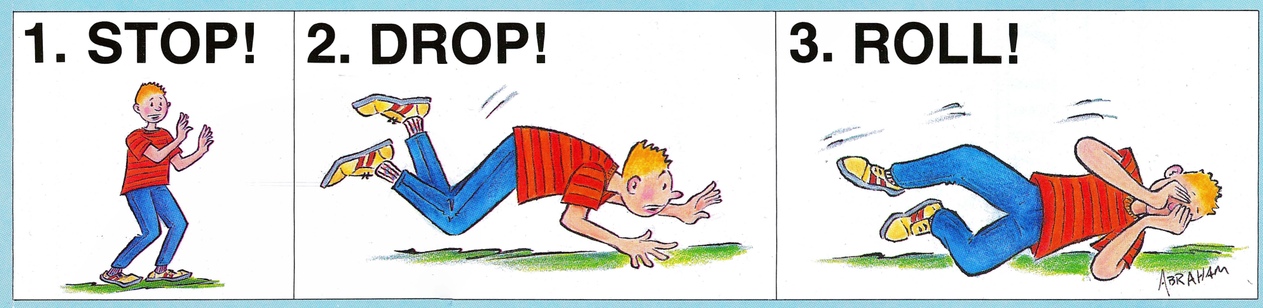
FAST FACTS
IT'S A FACT THAT...

- Every year more than three million fires are reported to fire departments in the United States.
- Every year fire causes more than 10,000 deaths in the U.S.
- Every year at least five million acres of U.S. forestland are destroyed by fire.
- One-half of all fires are caused by carelessness.
- On an average night in New York City, 10 fires are set on purpose.
- The hardest kind of fire to put out is an oil well fire.
- A fire hose can spray 325 gallons of water per minute.

ROLE PLAY
If Clothes Catch Fire...

Three simple words can help you stay safe if your clothing catches on fire. What are they? Practice *stop*, *drop*, and *roll* at home with your family.

Daniel Abraham



COPY

TAKE HOME

WORKSHEET TO COPY AND USE WITH THIS MONTH'S POSTER

NAME: _____

FAMILY SHARING PAGE

DEAR FAMILY: We are studying fire prevention in school. Your child has learned that it is important to practice fire safety measures. You may wish to review this list with your child to ensure that your home is fire-safe.

CHECKLIST FOR FIRE SAFETY

- ☐ 1. Smoke detectors are installed and work.
- ☐ 2. Windows and doors at all exits can be opened easily.
- ☐ 3. There are no piles of soiled rags in the kitchen, garage, or basement.
- ☐ 4. There are rope ladders in upstairs bedrooms, in case a family member must climb from a window.
- ☐ 5. We have a place to meet outside if there is a fire inside our home.
- ☐ 6. We have had a fire drill or have planned one.
- ☐ 7. Family members have practiced dialing the fire department and reporting a fire.

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INTERMEDIATE

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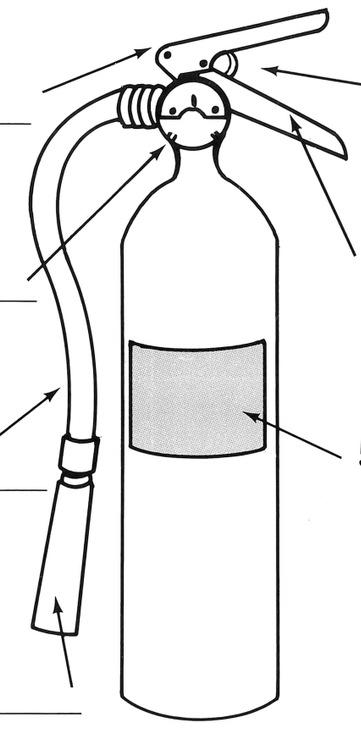
FIRE EXTINGUISHERS

DIRECTIONS: Label the parts of a fire extinguisher.



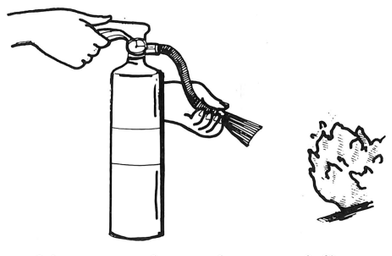
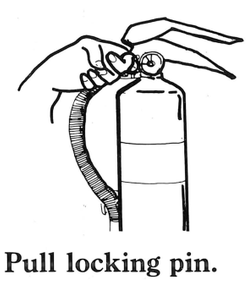
1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____

WORD LIST

Operating Lever	Instruction Panel
Hose	Air Pressure Gauge
Nozzle	Handle
	Locking Pin

DIRECTIONS: Ask your teacher to show you how to work a fire extinguisher. Then label the steps below in the right order.

How to Work An Extinguisher:

Step _____	Step _____	Step _____
		
Aim nozzle at base of fire.	Squeeze lever.	Pull locking pin.

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TEACHER'S GUIDE

WORKSHEET TO COPY AND USE WITH THIS MONTH'S POSTER

NOTES

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October 4–10 is Fire Prevention Week. This month's poster is an ideal resource for teaching fire safety to children. It provides important fire safety tips, facts about fire, and news about how computers are being used to fight some of these fires. The poster also suggests computer-related activities on the topic. The flipside of the poster contains three blackline masters that reinforce and extend the poster material.

USING THE POSTER

The poster is divided into six main sections. Here is how to get the most from each.

Be a Fire Marshall! Start with this quiz on fire safety hazards. Use it as a pretest to see how aware your students are of fire safety. *(Answers: Row one, left to right: overloaded electrical outlet, space heater located too close to blowing window curtains, gasoline being poured on barbecue fire. Row two: open paint cans stored in a pile, kids playing with matches, paper towel dispenser too close to stove.)*

Help students list other fire hazards on the chalkboard, such as throwing away cigarettes that are still burning and storing rags that are soaked with grease or oil. Have children check your school and their homes for these and other hazards.

It's a Fact That. . . Communicate the impact fire has had on our country by reviewing the fire statistics in this section. Encourage students to find other fire statistics and to list them on the chalkboard.

If Clothes Catch Fire. . . Stop, drop, and roll is the best action you can take if your clothes catch fire. This section provides a good illustration of this action. Discuss with kids why, if their clothes catch fire, they should stop immediately, and how rolling on the ground can help put out the flames. Then have them practice stop, drop, and roll.

Make a Fire Map It is always a good idea to map out the fire alarms, exits, and a proposed escape route that children would be expected to use should a fire break out in school. This activity suggests the class use a computer to print out a "professional" looking map. As a group, follow the escape route you designed, pointing out the alarms and exits.

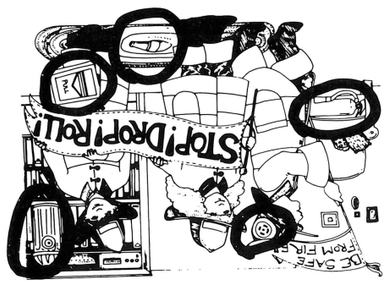
Help students look up the telephone number to dial in case there is a fire at home. When reporting a fire, students should give their name and the location of the fire. Stress that, in a real home fire, children should leave the house first — then call.

Tell students that if they see or smell smoke in their homes, they should always crawl to an exit. Smoke rises to the top of a room, therefore, the air closest to the floor should be the freshest. Smoke can be as dangerous as flames.

USING THE WORKSHEETS

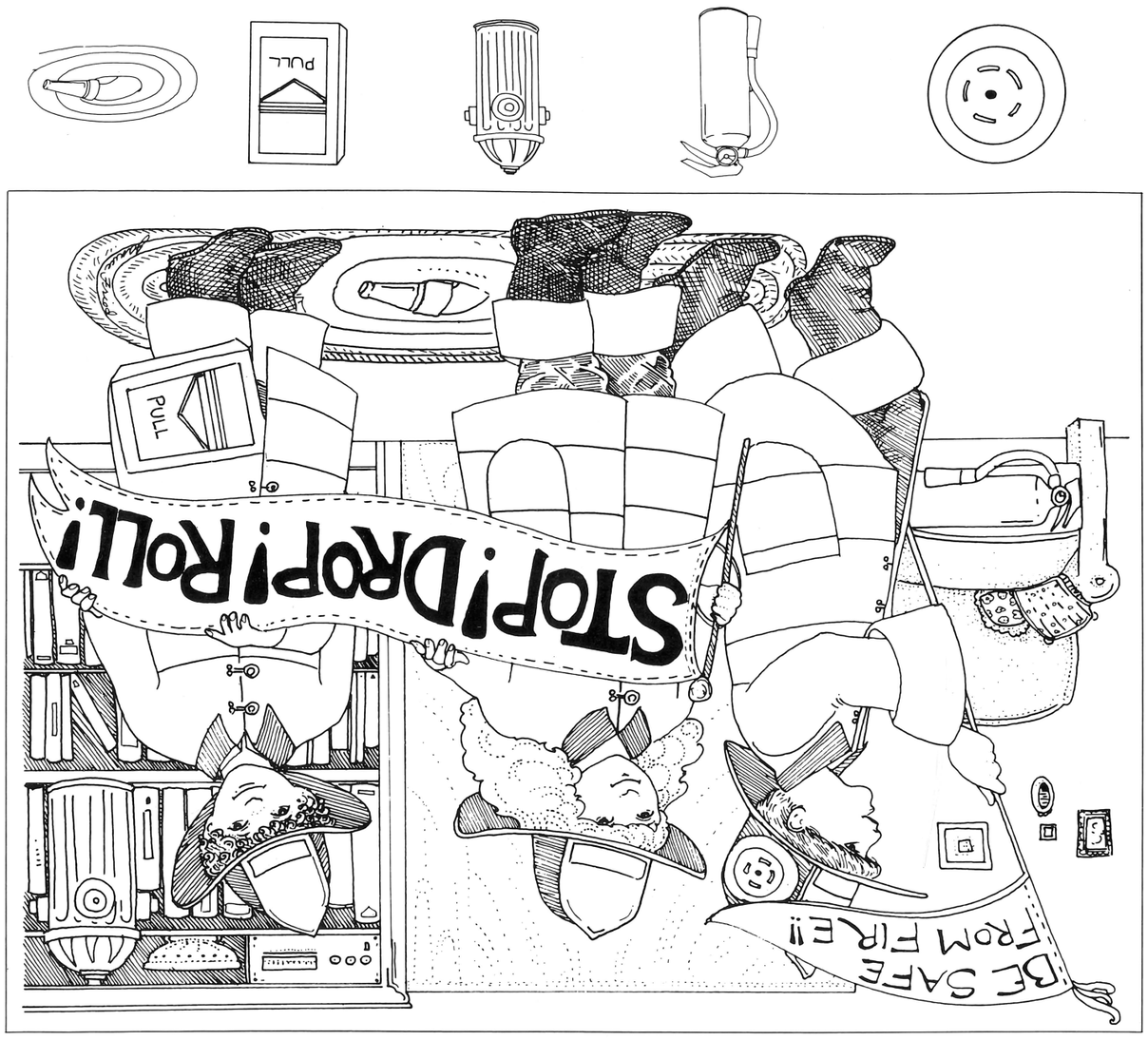
This month's worksheets examine fire safety tools and precautions.

Fire Tools — This worksheet introduces primary grade children to five basic fire tools: a smoke alarm, fire extinguisher, fire hydrant, alarm, and hose. Take students on a "fire walk" in which you point out the nearest locations of these tools and discuss how they are used to fight fire. Then ask children to look at the Fire Tool Worksheet and find the hidden pictures of the five tools they just learned about. Here is a completed worksheet:



Family Sharing Page — Send this fire safety checklist home with students of all ages. It is designed for parents and children to review together.

Smoke Alarm Extinguisher Hydrant Fire Alarm Hose



DIRECTIONS: Can you find these fire tools in the large picture below? Put a ring around each hidden picture.

NAME: _____

FIRE TOOLS

WORKSHEET TO COPY AND USE WITH THIS MONTH'S POSTER

PRIMARY

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